

UNITED STATES DEPARTMENT OF COMMERCE

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 BARONE
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EXAMINER

HEATHER B SHAPIRO CESARI AND MCKENNA 30 ROWES WHARF BOSTON MA 02110

PATEL, R

ART UNIT PAPER NUMBER

2786

DATE MAILED:

02/22/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/033,997

Applicant

Barone et al.

Examiner

Ramesh Patel

Group Art Unit 2786



Responsive to communication(s) filed on Mar 3, 1998	
☐ This action is FINAL .	
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quay/1935 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expire _longer, from the mailing date of this communication. Failure to respond application to become abandoned. (35 U.S.C. § 133). Extensions of tim 37 CFR 1.136(a).	within the period for response will cause the
Disposition of Claim	
X Claim(s) <u>1-29</u>	is/are pending in the applicat
Of the above, claim(s)	is/are withdrawn from consideration
Claim(s)	is/are allowed.
X Claim(s) <u>1-29</u>	is/are rejected.
Claim(s)	is/are objected to.
☐ Claims	are subject to restriction or election requirement.
Application Papers \[\text{\text{See}} \text{ See} \text{ the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.} \] \[\text{The drawing(s) filed on	
Attachment(s) ☒ Notice of References Cited, PTO-892 ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) ☐ Interview Summary, PTO-413 ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Notice of Informal Patent Application, PTO-152	<u>4 and 6</u>
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

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DETAILED ACTION

1. Claims 1-29 are presented for examination.

2. The information disclosure statements submitted on 7/27/98 and 8/3/99 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

<u>Drawings</u>

3. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 10, 18, 19 and 24, recites the limitations "subjecting", examiner is not sure what is subjecting means. Applicant suggested to review all the claims make appropriate corrections.

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Claim 6, recites the limitations "claim 35", which is improper dependency for claim 6, because a claim should be dependent to the preceding claim(s). Also, examiner has made official notice that there are only 29 claims in the disclosure, examiner is not sure whether claim 6 is depends on claim 5 or any other preceding claim(s). Applicant suggested to review all the claims make appropriate corrections.

Dependent claims which are not rejected are rejected based on rejected based claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 6. Claim 9 is rejected under 35 U.S.C. 102(e) as being anticipated by Harafuji et al..

As to claim 9, Harafuji teaches that the semiconductor device is produced by plasma generating and processing as shown in figures 12(a)-13(b), 15(a) and 16(a) wherein the end product is semiconductor device as claimed (see, abstract and col. 11, lines 42-68). See, *In re Brown*, 459 F.2d 531,535, 173 USPQ, 685, 688 (CCPA 1972).

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7. Claims 1-8 and 10-29 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior rt of the record fails to teach a method and an apparatus for determining a respective process value of at least variable governing a plasma process sequence for creating a desired surface profile on a process substrate which comprising: generating an approximate profile model from the initial surface profile model and respective test value of the at least one input variable; generating an indicator of difference between the test surface profile and the approximate profile prediction and generating a respective optimum value of the at least one unknown coefficient that minimizes the indicator of difference; modifying the initial surface profile model to include the at least one optimum value thereby providing a final model in terms of the at least one input variable and generating the respective process value of the at least one input variable from the final model and the desired surface profile.

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this or earlier communication from the examiner should be directed to Ramesh Patel at (703) 308-6673.

If attempts to reach the examiner by telephone are unsucessful, the examiner's supervisor, William Grant, can be reached on (703)308-1108.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Art Unit-2786 February 14, 2000 PRIMARY EXAMINER